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## AIR PROTECTION BRANCH

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*An Electric Membership Cooperative*

June 28, 2010

Mr. Eric Cornwell  
Georgia Environmental Protection Division  
Air Protection Branch  
4244 International Parkway, Suite 120  
Atlanta, GA 30354

Certified Mail/Return Receipt#  
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Dear Mr. Cornwell:

*Subject: Oglethorpe Power Corporation – Warren County PSD Permit Application  
Additional Consumption of B100*

Oglethorpe Power Corporation (Oglethorpe) appreciates your review of the permit application for our proposed nominal 100 megawatt (MW) biomass-fueled electric generating facility in Warren County, Georgia. As you are aware, the bubbling fluidized bed (BFB) biomass boiler requires usage of a startup fuel to raise the bed temperature sufficiently to combust biomass. For the startup fuel, Oglethorpe has identified two potential fuel types. The preferred fuel type is pure biodiesel (B100), with the alternative fuel type ultra low sulfur diesel; a blend is also possible. Page 2-2 of the October 2009 submittal provides more detail on the startup fuels.

Based on additional research on B100 and further discussions with boiler vendors, it appears that a B100 startup is likely feasible. However, that same research determined that there may be shelf life difficulties with B100 that do not occur with diesel. Depending on the feedstock for the biodiesel and ambient temperatures, shelf life may range from four to nine months.

Oglethorpe intends to have two, 60,000 gallon tanks for startup fuel. A typical startup is projected to consume in the range of 3,000 MMBtu of fuel. At an estimated heating value for B100 of 127 MMBtu per 1,000 gallons, each start could require approximately 23,000 gallons. Depending on how many starts are required per year, Oglethorpe may need to combust B100 at times other than startup to consume the B100 before the end of its shelf life. If Oglethorpe operated the Warren site for a full year without any shutdowns, as much as 120,000 gallons could need to be combusted during non-startup operation.

Compared to biomass, B100 is a higher cost fuel. Thus, Oglethorpe would combust as little B100 as feasible to maintain fuel quality. If fired, the firing rate would not exceed the firing rates during startup, and would likely be significantly lower.

Oglethorpe is actively pursuing ways to manage the shelf life of B100 to minimize the need to combust B100. However, Oglethorpe needs to have the option of combusting B100 to maintain fuel quality.

ENV-COR-10-069



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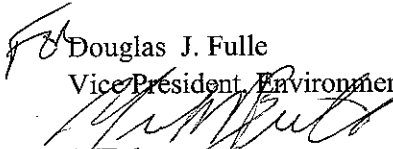
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June 25, 2010  
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Oglethorpe does not believe that there would be any noticeable differences in emission rates or stack parameters from combustion of B100 during normal operation, and Oglethorpe is not proposing any changes to any emission limits as a result of this change. Rather, Oglethorpe is solely seeking the option of combusting sufficient B100 per year during normal operation to maintain fuel quality.

Thank you for your continued review of our proposed project. If you have any questions about the material presented in this letter or require additional information, please do not hesitate to call me at 770-270-7166.

Sincerely,

OGLETHORPE POWER CORPORATION

 Douglas J. Fulle  
Vice President, Environmental Affairs  
DJF:dmc

c: EPA Region 4, Air Planning Branch, Air Permits Section  
Mr. Pete Courtney (Georgia EPD)  
Ms. Wende Martin (OPC)  
Mr. Mike Bilello (OPC)  
Mr. Russell Bailey (Trinity)